

## ABSTRACT OF THE DISCLOSURE

A method of processing a specimen, an apparatus therefor and a method of manufacture of a magnetic head using the same are provided, featuring a high etching rate at a low specimen temperature, and a simple corrosion prevention treatment for removing a residual chlorine component by liquid rinsing, and thereby eliminating provision of a post treatment step to remove a corrosion product. The method comprises the steps of: forming a lamination layer comprising a seed layer of NiFe alloy, an upper magnetic pole of NiFe alloy connected to the seed layer, a gas layer of an oxide film in close contact with the seed layer, and a shield layer of NiFe alloy in close contact with the gap layer; plasma-etching the seed layer using a gas which contains chlorine with the upper magnetic pole used as its mask; and removing a residual chlorine component by liquid rinsing, following by a drying process.